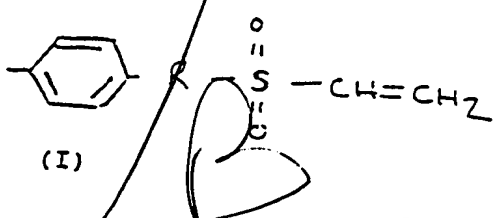
We claim:

~~CLAIMS~~

1. A polymer comprising a side chain of formula I:



(I)

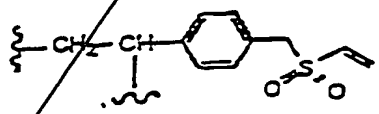
wherein ~~group~~ R is an alkyl, aryl, oxyalkyl or oxyaryl linker group.

2. A polymer as claimed in Claim 1 having a backbone comprising an ethylene grouping which is attached to the side chain.

3. A polymer as claimed in either one of Claims 1 and 2 wherein group R is a C_{1-10} alkyl or oxyalkyl group.

4. A polymer as claimed in Claim 3 wherein group R is a C_{1-6} alkyl group.

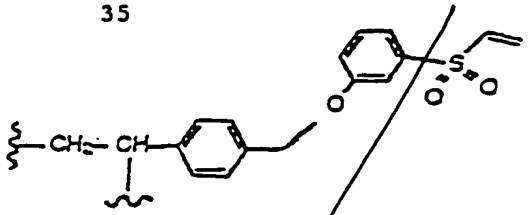
5. A polymer as claimed in Claim 4 wherein said side chain is of formula II:

II 

wherein ~CH_2-CH~ is part of the backbone of the polymer.

6. A polymer as claimed in either one of Claims 1 and 2 wherein said side chain is of formula III:

Sub a' cont'd

III 

wherein $\sim CH_2-CH\sim$ is part of the backbone of the polymer.

7. A polymer as claimed in any one of Claims 1 to 6 in the form of a resin suitable as a support for solid phase chemical reactions.

8. A method of producing a polymer as claimed in any one of Claim 1 to 6 wherein a Merrifield resin is reacted to replace the chlorine atom thereof with a sulphur containing group which is subsequently oxidised to yield a vinyl sulphone moiety of formula I.

9. A method of producing a solid-phase reactant for a solid-phase chemical reaction, said reactant comprising a complex of a substrate moiety and a resin comprising a polymer as claimed in any one of Claims 1 to 7, wherein said complex is produced by reacting a precursor substrate with a functional group on the resin.

10. A method of chemical synthesis involving a chemical reaction wherein one of the substrates of said reaction is in the form of a solid-phase complex with a resin comprising a polymer as claimed in any one of Claims 1 to 7.

11. A microreactor comprising a resin material as a support matrix for a solid-phase chemical reaction, wherein said resin material comprises a polymer as claimed in any one of Claims 1 to 7.